

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1, 12 and 15 have been amended. Claim 11 has been cancelled. Claims 1-10 and 12-15 are pending in the application.

CLAIM REJECTIONS – 35 U.S.C. § 102

Claims 1, 2, 6-8, 11, 12, 14, and 15 were rejected under 35 U.S.C. § 102(b) as being anticipated by Tanaka (U.S. Patent No. 5,838,132) (hereinafter "Tanaka").

Tanaka discloses a stepper-control method. In Tanaka, the stepper-motor M has a characteristic relationship between the supplied current amount I that is supplied to each of the coils +A/-A/+B/-B and the rotation torque TO of the stepper-motor M. The relationship between the supply current amount I and the rotation torque TO under a fixed pulse speed f is also stored in the ROM 7 as a second table t2 of the operation control of the facsimile device. Tanaka, 4:21-4:29 and Figure 4.

Amended claims 1, 12 and 15 recite: "...wherein the variable driving current is proportional to a magnitude of the torque applied to the stepper motor, so that a torque margin is maintained in a constant state." Support for this amendment may be found in at least original claim 11. In contrast to amended claims 1, 12 and 15, Tanaka discloses that the motor driver 8 receives a pulse signal from the CPU 1 and changes the excitation pattern to reduce the rotation torque TO of the stepper-motor M by increasing the pulse speed, wherein the current remains constant. Amended claims 1, 12 and 15 recite that the variable driving current is proportional to the applied torque.

Claims 2 and 6-8 are dependent on claim 1 and are therefore believed to allowable for the foregoing reasons. Claim 11 has been cancelled. Claim 14 is dependent on claim 12 and is therefore believed to be allowable for the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

CLAIM REJECTIONS – 35 U.S.C. § 103

Claims 3-5, 9, 10, and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka (U.S. Patent No. 5,838,132).

Claims 3-5, 9, 10 and 13 are dependent on claim 1 or 12 and are therefore believed to be allowable for the foregoing reasons. Further, claims 3-5, 9, 10 and 13 recite features that patentably distinguish over Tanaka. For example, claim 3 recites a CPU to calculate the torque using information on the A/D converted current and to read driving current setting information corresponding to the calculated torque information.”

Withdrawal of the foregoing rejection is requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Oct 13, 2005

By: Gregory W. Harper
Gregory W. Harper
Registration No. 55,248

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501